Syllabus

Usability Testing for Survey Research
1 credit/2 ECTS

Emily Geisen & Jennifer Romano-Bergstrom
Video lecture by Emily Geisen & Jennifer Romano-Bergstrom

March 31 – April 21, 2021

Short Course Description

This course introduces the concepts of usability and usability testing and why they are needed for survey research. The course provides a theoretical model for understanding the respondent-survey interaction and then provides practical methods for incorporating iterative user-centered design and testing into the survey development process. The course provides techniques and examples for designing, planning, conducting and analyzing usability studies on web or mobile surveys.

Course Objectives

By the end of the course, students will…

- understand what usability and usability testing are and how to apply usability testing to survey research
- learn about moderating techniques, such as the think-aloud protocol and verbal probing
- learn when to test, where to test (lab vs. field vs. remote) and who to test with (type and number of participants)
- be able to plan for usability testing (develop protocol guide, determine test metrics, consider hardware/software)
- learn what to test: conceptual testing, paper prototypes, wireframes
- understand how to collect, record, and analyze usability data

Prerequisites

Students are expected to be familiar with questionnaire design. Experience with cognitive testing is a plus, but not a requirement.

Class Structure and Course Concept

This is an online course, using a flipped classroom design. It covers the same material and content as an on-site course but runs differently. In this course, you are responsible for watching video-recorded lectures and reading the required literature for each unit prior to participating in mandatory weekly one-hour online meetings where students have the chance to discuss the materials from a unit with the instructor.

Although this is an online course where students have more freedom in when they engage with the course materials, students are expected to spend the same amount of time overall on all activities in the course – including preparatory activities (readings, studying), in-class-activities (watching videos, participating in online meetings), and follow-up activities (working on assignments and exams) – as in an on-site course. As a rule of thumb, you can expect to spend approximately 3h/week on in-class-activities and 9 hours per week on out-of-class activities (preparing for class, readings, assignments, projects, studying for quizzes and exams). Therefore, the workload in all courses will be approximately 12h/week. This is a 1-credit/2-ECTS course that runs for 4 weeks. Please note that the actual workload will depend on your personal knowledge.

Mandatory Weekly Online Meetings

Wednesdays, 12:00 PM EDT/6:00 PM CEST, starting March 31, 2021

Meetings will be held online through Zoom. Follow the link to the meeting sessions on the course website on mannheim.instructure.com. If video participation via Internet is not possible, arrangements can be made for students to dial in and join the meetings via telephone.

In preparation for the weekly online meetings, students are expected to watch the lecture videos and read the assigned literature before the start of the meeting. In addition, students are encouraged to post questions about the materials covered in the videos and readings of the week in the forum before the meetings (deadline for posting questions is Tuesday, *12:00 PM EDT/6:00 PM CEST*).

Students have the opportunity to use the Conferences feature in Canvas to connect with peers outside the scheduled weekly online meetings (e.g., for study groups). Students are not required to use Canvas Conferences and can of course use other online meeting platforms such as Google Hangouts, Skype or Microsoft Teams.

Grading

Grading will be based on:

- Participation in discussion during the weekly online meetings (10% of grade)
- Weekly online exercises reviewing specific aspects of the material covered (60% of grade)
- A final open-book online exam (30% of grade)

A+	*100 - 97*
A	*96 - 93*
A-	*92 - 90*
B+	*89 - 87*
B	*86 - 83*
B-	*82 - 80*
Etc.	

The grading scale is a base scale recommended by the MDM. Variations for grading on a scale are at the discretion of the instructor.

The final grade will be communicated under the assignment "Final Grade" in the Canvas course. Please note that the letter grade written in parentheses in Canvas is the correct final grade. The point-grade displayed alongside the letter grade is irrelevant and can be ignored.

Dates of when assignments will be due are indicated in the syllabus. Extensions will be granted sparingly and are at the instructors' discretion.

Technical Equipment Needs

The learning experience in this course will mainly rely on the online interaction between the students and the instructors during the weekly online meetings. Therefore, we encourage all students in this course to use a web camera and a headset. Decent quality headsets and web cams are available for less than $20 each. We ask students to refrain from using built-in web cams and speakers on their desktops or laptops. We know from our experience in previous online courses that this will reduce the quality of video and audio transmission and therefore will decrease the overall learning experience for all students in the course. In addition, we suggest that students use a wire connection (LAN), if available, when connecting to the online meetings. Wireless connections (WLAN) are usually less stable and might be dropped.

Long Course Description

Usability testing in survey research allows in-depth evaluation of how respondents and interviewers interact with questionnaires, particularly web and mobile surveys. A respondent may understand the survey question and response options but may be unable to select their answer accurately on the small screen of a smartphone. Although there is a growing body of literature on best practices for web surveys and mobile devices, not all design guidelines work equally well for all surveys and all survey populations. In addition, it is clear that the capabilities of computerized surveys are constantly emerging. Examples are the use of images, videos, maps and GPS, interactive features, and mobile devices. As a result, it is critical for researchers to have the necessary tools to evaluate, test, and modify surveys to incorporate user-centered design in an iterative method as part of the survey pretesting process.

Readings

Primary Readings
Geisen, E., & Romano Bergstrom, J. (2017). *Usability Testing for Survey Research*. Waltham: Morgan Kaufmann. (available at https://www.amazon.com/Usability-Testing-Survey-Research-Geisen/dp/0128036567)

Required and Recommended Readings
List of required and recommended readings for each class are provided below for each specific unit.

Academic Conduct

Clear definitions of the forms of academic misconduct, including cheating and plagiarism, as well as information about disciplinary sanctions for academic misconduct may be found at

https://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/III-100A.pdf (University of Maryland)

and in the MBS Honor Code, signed at the beginning of the program.

Knowledge of these rules is the responsibility of the student and ignorance of them does not excuse misconduct. The student is expected to be familiar with these guidelines before submitting any written

work or taking any exams in this course. Lack of familiarity with these rules in no way constitutes an excuse for acts of misconduct. Charges of plagiarism and other forms of academic misconduct will be dealt with very seriously and may result in oral or written reprimands, a lower or failing grade on the assignment, a lower or failing grade for the course, suspension, and/or, in some cases, expulsion from the university.

Accommodations for Students with Disabilities

In order to receive services, students at the University of Maryland must contact the Accessibility & Disability Service (ADS) office to register in person for services. Please call the office to set up an appointment to register with an ADS counselor. Contact the ADS office at 301.314.7682; https://www.counseling.umd.edu/ads/.

Students at the University of Mannheim should contact the Commissioner and Counsellor for Disabled Students and Students with Chronic Illnesses at http://www.uni-mannheim.de/studienbueros/english/counselling/disabled_persons_and_persons_with_chronic_illnesses/

Course Evaluation

In an effort to improve the learning experience for students in our online courses, students will be invited to participate in an online course evaluation at the end of the course (in addition to the standard university evaluation survey). Participation is entirely voluntary and highly appreciated.

Sessions

Week 1: Introduction

Video lecture: available Wednesday, March 24, 2021

Online meeting: Wednesday, March 31, 2021, 12:00 PM EDT/6:00 PM CEST

Assignment 1 due Wednesday, April 7, 2021, 12:00 PM EDT/6:00 PM CEST

Required Readings:
Textbook: Chapters 1 & 2

Recommended Readings:
Couper (2000). Usability evaluation of computer-assisted survey instruments. *Social Science Computer Review*, 18(4), 384-396.

Week 2: Moderating Techniques

Video lecture: available Wednesday, March 31, 2021

Online meeting: Wednesday, April 7, 2021, 12:00 PM EDT / 6:00 PM CEST

Assignment 2 due Wednesday, April 14, 2021, 12:00 PM EDT / 6:00 PM CEST

Required Readings:
Textbook: Chapters 6 & 7

Week 3: Test Materials, Metrics, Equipment, Location

Video lecture: available Wednesday, April 7, 2021, 12:00 PM EDT / 6:00 PM CEST

Online Meeting: Wednesday, April 14, 2021, 12:00 PM EDT/6:00 PM CEST

Assignment 3 due Wednesday, April 21, 2021, 12:00 PM EDT / 6:00 PM CEST

Required Readings:
Textbook: Chapters 4 & 5

Week 4: What to test / Analyzing Results

Video lecture: available Wednesday, April 14, 2021

Online meeting: Wednesday, April 21, 2021, 12:00 PM EDT/6:00 PM CEST

Required Readings:
Textbook: Chapters 3 & 8

Project/Homework/Final exam

A final open-book online exam
Due: Wednesday, April 28, 2021, 12:00 PM EDT/6:00 PM CEST